

# Cube-a Software Android Field Software © cube·a GPS TS GIS





Cube-a is Stonex's solution for professional surveying and GIS which has been designed and developed for the Android platform.

Thanks to the flexibility of the Android environment, we have been able to create a simple and intuitive user interface that makes surveyors ready for any work, saving time and increasing productivity.

Full support for touch gestures and the possibility to install it on Smartphones and Tablets are the keys to the success of Cube-a. It also includes support for many languages and adjusts its interface as from the current system language setting.

Cube-a is available in three versions: Cube-a for GNSS, Cube-a for GNSS+GIS and Cube-a for mechanical and robotic Total Stations.



# Cube-a | Stonex field software

Stonex field solutions for GNSS RTK, GIS and Total Station surveys will make operators' work quick and easy, ensuring high productivity in all jobs requiring precision and efficiency.

### **GNSS**

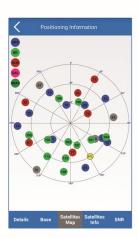
Cube-a is compatible with all Stonex GNSS Receivers. Supports Rover, Rover Stop&Go, Base and Static modes. Various screens provide useful information on the status of the GNSS receiver including the position and the signal quality of the Atlas satellite.

## **SURVEY**

A simple and intuitive survey interface with numerous indicators immediately helps the surveyor to understand what kind of work and in what conditions is taking place. Indicators show various information like solution status, position precision, battery levels, RTK correction delays and more. Intuitive screens allows for an easy change of settings, a view of the collected points, adding new CAD elements and drawings or proceed surveying.

## PHOTO & SKETCH

To improve and complete the survey and stakeout functions, you can also use the Photo & Sketch. This function can be used while surveying or even on the already acquired points: take photos and add notes, add and position some indicating arrows or simple hand drawn sketches.









# INTEGRATED CAD

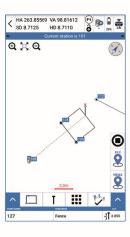
Cube-a includes a smart and easy to use CAD feature. The CAD has been designed to work with touch displays and it allows to easily draw points and other CAD entities by mean of a smart pointer which can be moved using one finger and which always transmits to the user a strong confidence of the result achieved. The help of object-snaps like point, mid-point, end-point, intersection and others makes it possible to integrate the survey with new elements directly in the field.











# **STAKEOUT**

A compact interface groups all the stakeout launching commands in one screen for an easier work in the field. Stakeout screens are enriched with both graphical and analytical indicators which guide the surveyor in order to reach the target point. Thanks to this interface, you can read all the information necessary to complete the stakeout work, to select points or to add them and quickly change all settings. Even in case of small monitors, the information and commands are always smartly arranged and readable, the buttons are clickable without difficulty and some of them can be reduced to leave more space for the map.

### TOTAL STATION

Cube-a has been designed to fully support mixed surveys. A Cube-a survey supports GPS points and classical polar stations and measures at the same time. Polar stations can be set to occupy previously collected GPS points or on unknown positions calculated using the Free Stationing program. Likewise, the GPS reference system can be adjusted to match an existing polar survey in local coordinates. Cube-a supports all Stonex Total Stations via Bluetooth.

### GIS

GIS functionalities are well integrated in the workflow of standard GPS surveying. Thanks to the Cube-a's ability to collect, not only single points but also to automatically draw vectors passing through the collected points, GIS surveying becomes fast and easy. The request to fill in the GIS data is automatic and automatically follows the point or vector acquisition. Data forms can be freely defined using the integrated Feature Set designer or automatically created by Cube-a starting from a sample DBF file. Import and export of standard shapefiles ensures the compatibility and interoperability of Cube-a with virtually any other GIS software.

UNI EN ISO 9001:2015 - CUBE-A 5 - NOVEMBER 2020 - VER01 - REV-02

GPS GIS\*

TS

# Cube-a FEATURES

Job management	√	✓	✓	Localization by one poin
Survey Point Library	√	✓	✓	Transformation from GP
System settings (units, precision, parameters, etc.)	<b>√</b>	<b>√</b>	<b>√</b>	Cartographic predefined
Import/export ASCII and DXF	√	✓	✓	National grids and geoid
Import/export Esri Shape (with attributes)		✓		Integrated CAD with o-s
Export Google Earth KML/Send to Google Earth	√	✓		Layers management
Import Raster Image	<b>√</b>	✓	✓	Custom Point Symbols a
Share files by cloud services, e-mail, Bluetooth,	,	,	,	Entity acquisition manag
Wi-Fi	$\checkmark$	$\checkmark$	$\checkmark$	Point Survey
Real time maps support	√	✓	✓	Hidden points calculatio
Send to Google Earth	√	✓	✓	Automatic point collection
Customizable ref. systems also by remote RTCM		,		Control RAW data recor
messages	✓	$\checkmark$		post-processing
Features codes (multiple feature tables)	<b>√</b>	<b>√</b>	<b>√</b>	Point stakeout
Fast Coding Panel	√	✓	✓	Line stakeout
Define GIS features and attributes		<b>√</b>		Height Stakeout (TIN or
Bluetooth Disto support	√	✓	✓	Stakeout reports
				Mixed Surveys**
GNSS MANAGEMENT				Measures (area, 3D dista
Support for Stonex receivers	✓	✓		Display functions (zoom
Generic NMEA (support for third party receivers) -	,	,		Surveying tools (quality,
Rover only	✓	$\checkmark$		indicators)
Receiver status (quality, position, sky view, satellites	,	,		Visualization of the draw
list, base info)	✓	$\checkmark$		Maps/BingMaps/OSM
Full support for features like E-Bubble, Tilt, Atlas,	,	,		Adjust background map
SureFix	✓	$\checkmark$		Map rotation in the direc
Network connections management	<b>√</b>	<b>√</b>		compass)
Support of RTCM 2.x, RTCM 3.x, CMR, CMR+	<b>√</b>	<b>√</b>		Sensor Calibration
Automatic GNSS model & features detection	<b>√</b>	<b>√</b>		Info commands (id, dista
Automatic antenna offset management	<b>√</b>	✓		object)
Bluetooth and Wi-Fi GNSS connection	<b>√</b>	<b>√</b>		Corner Point
				Snap to object
TS MANAGEMENT				Record Settings
TS Bluetooth			✓	COGO (perimeter, area,
TS Long Range Bluetooth			✓	Ability to freehand sketo
Search and prism tracking (Robotic only)			✓	points
Compensator interface			✓	Pregeo (Italian Cadastral
Station on point			✓	Road stakeout****
Free station / Least squares resection			✓	Raster georeferencing**
TS orientation st.dev. and check orientation			✓	Adjust raster images opa
Topographic basic calculation			✓	_
Rotate to GPS position**			<b>√</b>	GENERAL
Rotate to given point			✓	Automatic SW updates*
Export TS raw data			<b>√</b>	Direct technical support
Export mixed GPS+TS raw data	✓		<b>√</b>	<ul> <li>Unique license for tablet</li> </ul>

GPS GIS\*

TS

Illustrations, descriptions and technical specifications are not binding and may change

SURVEY MANAGEMENT			
Localization by one point and by multiple points	<b>√</b>	✓	✓
Transformation from GPS to grid and vice versa		✓	
Cartographic predefined reference systems	✓	✓	✓
National grids and geoids	✓	✓	
Integrated CAD with o-snaps****	<b>√</b>	<b>√</b>	<b>√</b>
Layers management	<b>√</b>	✓	✓
Custom Point Symbols and Symbol Library	<b>√</b>	<b>√</b>	<b>√</b>
Entity acquisition management	<b>√</b>	✓	✓
Point Survey	<b>√</b>	<b>√</b>	<b>√</b>
Hidden points calculation	<b>√</b>	<b>√</b>	<b>√</b>
Automatic point collection	<b>√</b>	<b>√</b>	<b>√</b>
Control RAW data recording for Static and Kinematic			
post-processing	$\checkmark$	$\checkmark$	
Point stakeout	<b>√</b>	<b>√</b>	<b>√</b>
Line stakeout	<u> </u>	<u> </u>	
Height Stakeout (TIN or inclined plane)	<u>√</u>	<u>√</u>	<u>√</u>
Stakeout reports	<del></del>	<u> </u>	<u> </u>
Mixed Surveys**	<b>√</b>	•	
Measures (area, 3D distance,etc)	<b>√</b>	<b>√</b>	-/
Display functions (zoom, pan,etc)	<u>√</u>		<b>√</b>
Surveying tools (quality, battery and solution			
indicators)	$\checkmark$	$\checkmark$	
Visualization of the drawing on Google			
Maps/BingMaps/OSM	$\checkmark$	✓	✓
Adjust background map transparency	<b>√</b>	<b>√</b>	<b>√</b>
Map rotation in the direction of walking (using tablet e-			
compass)	$\checkmark$	$\checkmark$	$\checkmark$
Sensor Calibration	<b>√</b>	<b>√</b>	
Info commands (id, distance, area, angle, distance to		V	
object)	✓	$\checkmark$	✓
Corner Point	<b>√</b>	<b>√</b>	
Snap to object	<b>√</b>	<u>√</u>	<b>√</b>
Record Settings		<u>√</u>	
COGO (perimeter, area, calculator, etc)			
Ability to freehand sketch in the pictures of collected			
	✓	✓	✓
points  Proggo (Italian Codestral data)	<b>√</b>	<b>√</b>	<b>√</b>
Pregeo (Italian Cadastral data)			
Road stakeout****			
Raster georeferencing****	<b>√</b>		<b>√</b>
Adjust raster images opacity	✓	✓	<b>√</b>
GENERAL			
Automatic SW updates***	_/	_/	_/
Direct technical support	/	-/	/
Unique license for tablet/handheld software	V	v	v
onique neense for tablet/fiditurielu softwale	✓	✓	✓

version



<sup>\*</sup>GIS available only if GPS module enabled.

\*\*Available only if GPS and TS modules enabled

\*\*\*Internet connection required. Additional charges could apply.

\*\*\*\*Planned for Q1 2021